

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) Anode module (1) for a liquid-metal anode X-ray source which has an electron entry window (3) in the region of focus (2),

characterized in that

an X-ray beam exit window (4) lies opposite the electron entry window (3) and the exit angle (Θ) of the X-ray beams (7) between an electron beam (6) entering through the electron entry window (3) along the direction of incidence (5) and the X-ray beams (7) exiting through the X-ray beam exit window (4) is between 5° and 50° , ~~in particular 15° .~~

2. (currently amended) Anode module (1) according to claim 1, characterized in that the electron exit window (3) is a metal foil, in particular of tungsten, from 5 to $30\text{ }\mu\text{m}$, ~~in particular $15\text{ }\mu\text{m}$, thick, or a diamond film, a ceramic material or a monocrystal, in particular of cubic boron nitride.~~

3. (currently amended) Anode module (1) according to claim 1 ~~one of the previous claims~~, characterized in that the X-ray beam exit window (4) is a steel sheet from 100 to $400\text{ }\mu\text{m}$, ~~in particular $250\text{ }\mu\text{m}$, thick.~~

4. (currently amended) Anode module (1) according to claim 1 ~~one of the previous claims~~, characterized in that in the region of focus (2) it is from 100 to $350\text{ }\mu\text{m}$, ~~in particular $200\text{ }\mu\text{m}$, thick in the direction of the incident electron beam (6).~~

5. (currently amended) Anode module (1) according to claim 1 ~~one of the previous claims~~, characterized in that in the region of focus (2) it has a constricting channel (8) in the direction of the incident electron beam (6) and outside the region of focus (2) is from 5 to 10 mm, ~~preferably 8 mm, thick.~~

6. (currently amended) Anode module (1) according to claim 1 ~~one of the previous claims~~, characterized in that the electron entry window (3) is convexly curved perpendicular to the direction of flow (9) of the liquid metal (10), ~~in particular like part of a cylinder surface.~~

7. (currently amended) Anode module (1) according to claim 1 ~~one of the previous claims~~, characterized in that the X-ray beam exit window (4) is concavely curved perpendicular to the direction of flow (9) of the liquid metal (10), ~~in particular like part of a cylinder surface.~~

8. (currently amended) Anode module (1) according to claim 1 ~~one of the previous claims~~, characterized in that the focus length is 2 to 8 mm, ~~in particular 5 mm.~~

9. (currently amended) Anode module (1) according to claim 1 ~~one of the previous claims~~, characterized in that the effective focus size is 1 mm x 1,3 mm.

10. (currently amended) Anode module (1) according to claim 1 ~~one of the previous claims~~,

characterized in that the region of focus (2) runs parallel to the Y-Z plane which stands perpendicular to the direction of flow (9) of the liquid metal (10).

11. (currently amended) Anode module (1) according to claim 1 ~~one of the previous claims~~, characterized in that the angle of incidence (α) between the direction of incidence (5) of the electron beam (6) and the Z-axis is between 5° and 65°, ~~preferably 50°~~.

12. (currently amended) Anode module (1) according to claim 1 ~~one of the previous claims~~, characterized in that the anode angle (β) between the exit direction (12) of the X-ray beam (7) and the Y-axis is between 10° and 50°, ~~preferably 20°~~.

13. (currently amended) Anode module (1) according to claim 1 ~~one of the previous claims~~, characterized in that the angle of incidence (α), the anode angle (β) and the exit angle (Θ) all lie in the Y-Z plane.

14. (currently amended) Anode module (1) according to claim 1 ~~one of the previous claims~~, characterized in that the relationship between the width (B) of the X-ray beam (7) and the height (H) of the X-ray beam (7) in the X-Z plane lies between 2 and 6, ~~preferably 4~~.

15. (currently amended) X-radiator with an electron source for the emission of electrons and a liquid-metal anode emitting X-ray beams (7) when the electrons strike, which has an anode module (1) according to claim 1 ~~one of the previous claims~~.